

APPENDIX I: LTE DOWNLINK ONLY CARRIER AGGREGATION TEST REDUCTION METHODOLOGY

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.

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DUT Type: Portable Computing Device		APPENDIX I Page 1 of 14

Table I-1 – Example of Exclusion Table for SISO Configurations

[illegible]

Table I-2 – Example of Exclusion Table for 4x4 Downlink MIMO Configurations



Note: [CC] indicates component carrier with 4x4 DL MIMO antenna configuration

I.1 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)ii) of KDB 941225 D05 V01r02. All LTE bandwidth conducted powers needed for PCC uplink configuration selection can be found in the RF Conducted Powers Section and LTE/NR Lower Bandwidth RF Conducted Power Appendix. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.

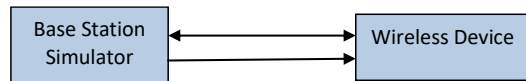


Figure I-1
DL CA Power Measurement Setup

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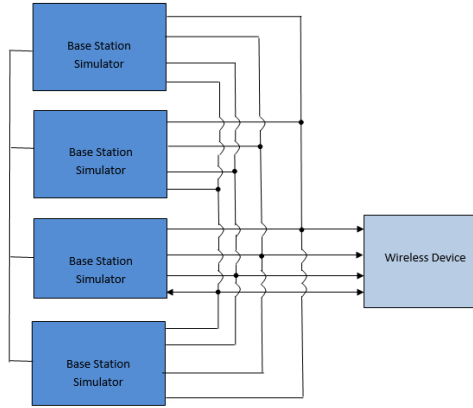


Figure I-2
DL CA with DL 4x4 MIMO Power Measurement Setup

I.2 Downlink Carrier Aggregation RF Conducted Powers

I.2.1 LTE Band 71 as PCC

Table I-3
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch	PCC				PCC (DL) Channel	PCC (DL) Freq [MHz]	SCC 1			SCC 2			SCC 3			SCC 4			LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)			
				Mod.	PCC UL RB	PCC UL RB Offset	SCC Band			SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq [MHz]						
CA 4A-4A-71A	LTE B71	20	133297	QPSK	1	0	68761	634.5	LTE B4	20	2175	2132.5	LTE B4	20	2350	2150	-	-	-	-	-	23.49	23.57			
CA 4B-4B-71A	LTE B71	20	133297	QPSK	1	0	68761	634.5	LTE B4B	20	5590	3625	LTE B4B	20	5590	3625	-	-	-	-	-	23.49	23.57			
CA 4B-71A	LTE B71	20	133297	QPSK	1	0	68761	634.5	LTE B4B	20	5590	3625	LTE B4B	20	5590	3625	-	-	-	-	-	23.52	23.57			
CA 2A-2A-4A-71A	LTE B71	20	133297	QPSK	1	0	68761	634.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B4	20	2175	2132.5	-	-	23.67	23.57		
CA 2A-6A-6A-71A	LTE B71	20	133297	QPSK	1	0	68761	634.5	LTE B2	20	900	1960	LTE B6A	20	6576	2145	LTE B6A	20	6576	2145	-	-	23.56	23.57		
CA 2A-6C-71A	LTE B71	20	133297	QPSK	1	0	68761	634.5	LTE B2	20	900	1960	LTE B6C	20	6576	2145	LTE B6C	20	6576	2145	-	-	23.64	23.57		
CA 2A-7A-6A-71A	LTE B71	20	133297	QPSK	1	0	68761	634.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B7	20	3100	2655	LTE B6C	20	66786	2145	23.93	23.57

I.2.1 LTE Band 12 as PCC

Table I-4
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC				PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC 1			SCC Band	SCC 2			SCC Band	SCC 3			SCC Band	SCC 4			LTE Tx Power with CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
				Mod.	PCC UL RB	PCC UL RB Offset				SCC Band	SCC BW [MHz]	SCC (DL) Channel		SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]		SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band		SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]		
CA 2A-12A (1)	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	-	-	-	-	-	-	-	-	-	-	-	-	23.80	24.05
CA 4A-12A (1)	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	23.91	24.05
CA 4A-12A (2)	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	-	-	-	-	23.91	24.05
CA 12A-25A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B25	20	8365	1962.5	-	-	-	-	-	-	-	-	-	-	-	-	24.01	24.05
CA 12A-48A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B48	20	5590	3625	-	-	-	-	-	-	-	-	-	-	-	-	23.95	24.05
CA 12A-66A (1)	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	23.94	24.05
CA 12A-66A (2)	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B66	20	66786	2145	-	-	-	-	-	-	-	-	-	-	-	-	23.94	24.05
CA 7A-12B	LTE B12	5	23155	QPSK	1	0	6155	743.5	LTE B12	10	9083	738.3	LTE B7	20	3100	2655	-	-	-	-	-	-	-	-	23.90	23.88
CA 12A-48C	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B48	20	5590	3625	LTE B48	20	5590	3625	-	-	-	-	-	-	-	-	23.94	24.05
CA 12A-66B	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B66	15	66786	2145	LTE B66B	5	66879	2154.3	-	-	-	-	-	-	-	-	24.04	24.05
CA 2A-2A-4A-12A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B4	20	2175	2132.5	-	-	-	-	24.11	24.05
CA 2A-4A-4A-12A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	-	24.13	24.05
CA 2A-4A-7A-12A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B7	20	3100	2655	-	-	-	-	24.65	24.05
CA 2A-4A-12B	LTE B12	5	23155	QPSK	1	0	6155	743.5	LTE B12	10	9083	738.3	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	-	-	-	-	23.93	23.88
CA 2A-4A-12A-30A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B30	10	8520	2395	-	-	-	-	23.95	24.05
CA 2A-12A-6A-6C	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B6C	20	66786	2145	LTE B6C	20	66786	2145	-	-	-	-	24.03	24.05
CA 4A-4A-12B	LTE B12	5	23155	QPSK	1	0	6155	743.5	LTE B12	10	9083	738.3	LTE B4	20	2175	2132.5	LTE B4	10	2350	2150	-	-	-	-	23.67	23.66
CA 2A-2A-7A-12A-6A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B7	20	3100	2655	LTE B6C	20	66786	2145	24.00	24.05
CA 2A-2A-12B-6A	LTE B12	5	23155	QPSK	1	0	6155	743.5	LTE B12	10	9083	738.3	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B6C	20	66786	2145	23.70	23.66
CA 2A-2A-12A-30A-6A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B30	10	8520	2395	LTE B6C	20	66786	2145	23.96	24.05
CA 2A-2A-12A-6A-6A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B6C	20	66786	2145	LTE B6C	20	67236	2190	24.04	24.05
CA 2A-12B-6A-6A	LTE B12	1	23155	QPSK	1	0	6155	743.5	LTE B12	10	9083	738.3	LTE B2	20	900	1960	LTE B6C	20	66786	2145	LTE B6C	20	67236	2190	23.71	23.66
CA 2A-12A-30A-6A-6A	LTE B12	10	23095	QPSK	1	25	5095	737.5	LTE B2	20	900	1960	LTE B30	10	8520	2395	LTE B6C	20	66786	2145	LTE B6C	20	67236	2190	23.94	24.05

I.2.2 LTE Band 13 as PCC

Table I-5
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC				SCC 1				SCC 2				SCC 3				SCC 4				Power				
			PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)				
CA_2A-4A-13A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	-	-	-	-	-	-	-	-	23.28	23.89
CA_2A-13A-48A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B48	20	5590	3625	-	-	-	-	-	-	-	-	23.28	23.89
CA_4A-4A-13A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B4	20	2175	2132.5	LTE B4	20	2380	2180	-	-	-	-	-	-	-	-	23.65	23.89
CA_13A-48B	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B48	10	5590	3625	LTE B48	10	5609	3634.9	-	-	-	-	-	-	-	-	23.91	23.89
CA_13A-48B-66A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B48	20	5590	3625	LTE B66	20	6678	2145	-	-	-	-	-	-	-	-	23.99	23.89
CA_2A-13A-48C	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B48	20	5590	3625	LTE B48	20	5618	3644.8	-	-	-	-	23.21	23.89
CA_2A-13A-66B	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B66	20	6678	2145	LTE B66	20	6679	2154.3	-	-	-	-	23.18	23.89
CA_2A-13A-66C	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B66	20	6678	2145	LTE B66	20	6684	2146.8	-	-	-	-	23.61	23.89
CA_13A-48B-66B	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B48	20	5590	3625	LTE B66	15	6678	2145	LTE B66	5	6679	2154.3	-	-	-	-	23.28	23.89
CA_13A-48B-66C	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B48	20	5590	3625	LTE B66	20	6678	2145	LTE B66	20	6684	2146.8	-	-	-	-	23.61	23.89
CA_13A-66A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B66	20	6678	2145	LTE B66	5	6726	2183.2	LTE B66	15	6726	2182.5	-	-	-	-	23.62	23.89
CA_13A-66A-66C	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B66	20	6678	2145	LTE B66	20	6726	2183.2	LTE B66	20	6726	2183	-	-	-	-	23.62	23.89
CA_13A-66B	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B66	20	6678	2145	LTE B66	20	6684	2146.8	LTE B66	20	6688	2147.2	-	-	-	-	23.65	23.89
CA_2A-2A-7A-7A-13A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B7	20	3100	2655	LTE B7	20	2850	2630	23.50	23.89
CA_2A-2A-7C-13A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B7	20	3100	2655	LTE B7	20	2902	2635.2	23.49	23.89
CA_2A-2A-13A-66A-66A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	6678	2145	LTE B66	20	6723	2190	23.66	23.89
CA_2A-7A-7A-13A-66A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B7	20	3100	2655	LTE B7	20	2850	2630	LTE B66	20	6678	2145	23.46	23.89
CA_2A-7C-13A-66A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B7	20	3100	2655	LTE B7	20	2902	2635.2	LTE B66	20	6678	2145	23.53	23.89
CA_2A-13A-48D	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B48	20	5590	3625	LTE B48	20	5618	3644.8	LTE B48	20	5618	3644.8	23.31	23.89
CA_2A-13A-48C-66A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B2	20	900	1960	LTE B48	20	5590	3625	LTE B48	20	5618	3644.8	LTE B66	20	6678	2145	23.32	23.89
CA_13A-48E	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B48	20	5590	3625	LTE B48	20	5618	3644.8	LTE B48	20	5618	3644.8	LTE B48	20	5618	3644.8	24.01	23.89
CA_13A-48D-66A	LTE B13	10	2320	762	QPSK	1	25	5230	751	LTE B48	20	5590	3625	LTE B48	20	5618	3644.8	LTE B48	20	5618	3644.8	LTE B66	20	6678	2145	24.00	23.89

I.2.3 LTE Band 14 as PCC

Table I-6
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC				SCC 1				SCC 2				SCC 3				SCC 4				Power			
				PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_2A-2A-10A-20A-66A	LTE B14	10	2330	793	QPSK	1	0	5330	763	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B20	10	8620	2355	LTE B66	20	6678	2145	23.72	23.90
CA_2A-2A-14A-66A-66A	LTE B14	10	2330	793	QPSK	1	0	5330	763	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	6678	2145	LTE B66	20	6723	2190	23.75	23.90
CA_2A-14A-20A-66A-66A	LTE B14	10	2330	793	QPSK	1	0	5330	763	LTE B2	20	900	1960	LTE B20	10	8620	2355	LTE B66	20	6678	2145	LTE B66	20	6723	2190	23.87	23.90

I.2.4 LTE Band 26 as PCC

Table I-7
Maximum Output Powers

Combination	PCC									SCC 1				Power	
	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA_25A-26A	LTE B26	15	26865	831.5	QPSK	1	74	8865	876.5	LTE B25	20	8365	1962.5	24.20	24.25
CA_26A-41A	LTE B26	15	26865	831.5	QPSK	1	74	8865	876.5	LTE B41	20	40620	2593	24.23	24.25

I.2.5 LTE Band 66 as PCC

Table I-8
Maximum Output Powers

[illegible]

I.2.6 LTE Band 25 as PCC

Table I-9
Maximum Output Powers

[illegible]

I.2.1 LTE Band 7 as PCC

Table I-10
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch	PCC (UL) Freq [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq [MHz]	SCC 1			SCC 2			SCC 3			SCC 4			Power					
										SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA 5A-7A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B5	10	2525	881.5	-	-	-	-	-	-	-	-	24.01	23.96				
CA 4A-5A-7A (1)	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B4	20	2175	2132.5	LTE B4	20	2175	2132.5	-	-	-	-	-	23.98	23.96			
CA 7A-12B	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B12	5	6095	737.5	LTE B12	5	6047	732.7	-	-	-	-	-	23.96	23.96			
CA 2A-2A-5A-7A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B5	10	2525	881.5	-	-	24.00	23.96		
CA 2A-5A-7A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B2	20	2050	2030	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	-	-	23.99	23.96		
CA 2A-7C	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2002	2039.2	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	-	-	24.00	23.96		
CA 2A-4A-7A-12A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B12	10	6095	737.5	-	-	23.99	23.96		
CA 2A-7A-7A-23A	LTE B7	20	21100	2535	QPSK	1	25	9100	2655	LTE B7	20	2050	2030	LTE B2	20	900	1960	LTE B29	10	9715	722.5	-	-	23.98	23.96		
CA 5A-7A-66A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B5	10	2525	881.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	-	-	24.01	23.96		
CA 7A-7A-25A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2050	2030	LTE B25	20	8305	1962.5	LTE B66	20	66786	2145	-	-	23.99	23.96		
CA 7C-66A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2002	2039.2	LTE B25	20	8305	1962.5	LTE B66	20	67236	2190	-	-	24.05	23.96		
CA 7A-7A-25A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2050	2030	LTE B29	10	9715	722.5	LTE B66	20	66786	2145	-	-	24.01	23.96		
CA 7C-66A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2002	2039.2	LTE B66	20	66786	2145	LTE B66	20	67236	2190	-	-	23.99	23.96		
CA 2A-2A-7A-7A-13A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2050	2030	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B13	10	5230	751	24.87	23.96
CA 2A-2A-7A-13A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	3152	2660.2	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B13	10	5230	751	24.06	23.96
CA 2A-2A-7A-12A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B12	10	6095	737.5	LTE B66	20	66786	2145	24.07	23.96
CA 2A-2A-7A-66A-11A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B66	20	66786	2145	LTE B71	20	66781	634.5	23.98	23.96
CA 2A-5A-7A-7A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2050	2030	LTE B2	20	900	1960	LTE B5	10	2525	881.5	LTE B66	20	66786	2145	24.03	23.96
CA 2A-5A-7C-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	3152	2660.2	LTE B2	20	900	1960	LTE B5	10	2525	881.5	LTE B66	20	66786	2145	24.02	23.96
CA 2A-7A-13A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2902	2635.2	LTE B13	10	5230	751	LTE B66	20	66786	2145	LTE B66	20	66786	2145	24.07	23.96
CA 2A-7C-13A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2902	2635.2	LTE B2	20	900	1960	LTE B13	10	5230	751	LTE B66	20	66786	2145	24.08	23.96
CA 2A-7A-7A-25A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2050	2030	LTE B2	20	900	1960	LTE B29	10	9715	722.5	LTE B66	20	66786	2145	24.08	23.96
CA 2A-7C-25A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2902	2635.2	LTE B2	20	900	1960	LTE B29	10	9715	722.5	LTE B66	20	66786	2145	24.04	23.96
CA 2A-7A-7A-66A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2050	2030	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	67236	2190	24.01	23.96
CA 2A-7C-66A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2902	2635.2	LTE B2	20	900	1960	LTE B66	20	66786	2145	LTE B66	20	67236	2190	24.02	23.96
CA 7A-7A-25A-66A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2050	2030	LTE B25	20	8305	1962.5	LTE B66	20	67236	2190	LTE B66	20	67236	2190	23.99	23.96
CA 7C-25A-25A-66A	LTE B7	20	21100	2535	QPSK	1	0	3100	2655	LTE B7	20	2902	2635.2	LTE B25	20	8305	1962.5	LTE B66	20	67236	2190	LTE B66	20	67236	2190	24.01	23.96

I.2.2 LTE Band 30 as PCC

Table I-11
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC				SCC 1				SCC 2				SCC 3				SCC 4				Power				
			PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)				
CA 2A-4A-5A-30A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B5	10	2025	881.5	-	-	22.82	22.80		
CA 2A-4A-12A-30A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B12	10	6095	737.5	-	-	22.86	22.80		
CA 2A-4A-29A-30A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B29	10	9715	722.5	-	-	22.80	22.80		
CA 2A-5A-12A-30A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B4	20	2175	2132.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	22.88	22.80
CA 2A-2A-5A-30A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B5	10	2025	881.5	LTE B66	20	66786	2145	22.88	22.80
CA 2A-2A-12A-30A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B12	10	6095	737.5	LTE B66	20	66786	2145	22.87	22.80
CA 2A-2A-14A-30A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B14	10	5330	763	LTE B66	20	66786	2145	22.86	22.80
CA 2A-2A-29A-30A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B2	20	700	1940	LTE B29	10	9715	722.5	LTE B66	20	66786	2145	22.89	22.80
CA 2A-5A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B6	20	7535	881.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	23.77	22.80
CA 2A-12A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B12	10	6095	737.5	LTE B66	20	66786	2145	LTE B66	20	67236	2190	22.85	22.80
CA 2A-14A-30A-66A-66A	LTE B30	10	27710	2310	QPSK	1	25	9820	2365	LTE B2	20	900	1960	LTE B14	10	5330	763	LTE B66	20	66786	2145	LTE B66	20	67236	2190	22.92	22.80

I.2.3 LTE Band 41 as PCC

Table I-12
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch. Freq. [MHz]	PCC					SCC 1				SCC 2				Power		
				Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Channel	PCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	SCC Band	SCC BW [MHz]	SCC (DL) Channel	SCC (DL) Freq. [MHz]	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)	
CA 41A-41A (1)	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	LTE B41	20	41490	2680	-	-	-	-	23.99	24.02
CA 41A-41C	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	LTE B41	20	41292	2660.2	LTE B41	20	41490	2680	23.99	24.02
CA 41C-41A	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	LTE B41	20	40356	2566.6	LTE B41	20	41490	2680	23.99	24.02
CA 41D	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	LTE B41	20	40356	2566.6	LTE B41	20	40554	2586.4	23.51	24.02

I.2.1 LTE Band 48 as PCC

Table I-13
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch. Freq. [MHz]	PCC				PCC (DL) Channel	PCC (DL) Freq. [MHz]
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I.3.4 LTE Band 13 as PCC

Table I-17
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC [UL] CH	PCC [UL] Freq. [MHz]	Mod.	PCC				SCC1				SCC2				SCC3				SCC4				Power						
						PCC UL Fd	PCC UL OffCh	PCC [DL] CH	PCC [DL] Freq. [MHz]	DL Cont. Conf.	SCC Band	SCC BW [MHz]	SCC [UL] CH	SCC [UL] Freq. [MHz]	DL Cont. Conf.	SCC Band	SCC BW [MHz]	SCC [UL] CH	SCC [UL] Freq. [MHz]	DL Cont. Conf.	SCC Band	SCC BW [MHz]	SCC [UL] CH	SCC [UL] Freq. [MHz]	DL Cont. Conf.	SCC Band	SCC BW [MHz]	SCC [UL] CH	SCC [UL] Freq. [MHz]	DL Cont. Conf.	LTE Tx Power [dBm]	LTE Single Carrier Tx Power [dBm]
CA [2A-2A] 13A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4	20	2175	2132.5	444	-	-	-	-	-	-	-	-	-	23.77	23.89	
CA [2A-2A] 13A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B4	20	900	1960	444	LTE B4	20	2175	2132.5	242	-	-	-	-	-	-	-	-	-	23.77	23.89	
CA [2A] 14A-13A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	444	LTE B4	20	2175	2132.5	444	-	-	-	-	-	-	-	-	-	23.76	23.89	
CA [2A] 14A-13A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B4	20	2175	2132.5	444	LTE B4	20	2175	2132.5	444	-	-	-	-	-	-	-	-	-	23.76	23.89	
CA [2A] 14A-13A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B4	20	2175	2132.5	444	LTE B4	20	2175	2132.5	444	-	-	-	-	-	-	-	-	-	23.76	23.89	
CA [2A] 14A-13A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B4	20	2175	2132.5	444	LTE B4	20	2175	2132.5	444	-	-	-	-	-	-	-	-	-	23.76	23.89	
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B	20	68786	2145	242	-	-	-	-	-	23.81	23.89
CA [2A] 13A-48A-66A	LTE B13	20	23230	782	QPSK	1	25	5230	753	242	LTE B2	20	900	1960	242	LTE B4B	20	53990	5625	242	LTE B6B											

I.3.5 LTE Band 14 as PCC

Table I-18
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC [UL] Ch.	PCC [UL] Freq. [MHz]	Mod.	PCC UL F1 RB	PCC UL on Other	PCC [DL] Ch.	PCC [DL] Freq. [MHz]	DL Cont.	SCC 3				SCC 2				SCC 1				SCC 4				LTE Tx Power [dBm]	Power Single Carrier Tx Power [dBm]				
											SCC Band	SCC BW [MHz]	SCC [UL] Ch.	SCC Freq. [MHz]	DL Cont.	SCC Band	SCC BW [MHz]	SCC [UL] Ch.	SCC [DL] Freq. [MHz]	DL Cont.	SCC Band	SCC BW [MHz]	SCC [UL] Ch.	SCC [DL] Freq. [MHz]	DL Cont.	SCC Band			SCC BW [MHz]	SCC [UL] Ch.	SCC [DL] Freq. [MHz]	DL Cont.
CA 26-26-14A-26A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B20	10	9620	2355	2d	LTE B66	20	66765	2145	4d	23.78	23.90
CA 26-26A-14A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B20	10	9620	2355	2d	LTE B66	20	66765	2145	4d	23.77	23.90
CA 26-26A-14A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	4d	23.79	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	4d	23.79	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B30	10	9620	2355	2d	LTE B66	20	66765	2145	4d	23.77	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	2d	23.75	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B66	20	66765	2145	4d	LTE B66	20	66765	2145	4d	23.89	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B2	20	700	1940	2d	LTE B66	20	66765	2145	4d	LTE B66	20	66765	2145	4d	23.89	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	2d	LTE B66	20	66765	2145	2d	23.84	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B30	10	9620	2355	2d	LTE B66	20	66765	2145	2d	LTE B66	20	66765	2145	2d	23.86	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	2d	LTE B66	20	66765	2145	2d	23.85	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	2d	LTE B66	20	66765	2145	2d	23.85	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	2d	LTE B66	20	66765	2145	2d	23.85	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	2d	LTE B66	20	66765	2145	2d	23.85	23.90
CA 26A-26A-14A-30A (66A)	LTE B14	10	23330	793	QPSK	1	0	5330	763	2d	LTE B2	20	900	1960	2d	LTE B30	10	9620	2355	4d	LTE B66	20	66765	2145	2d	LTE B66	20	66765	2145	2d	23.85	23.90

I.3.6 LTE Band 26 as PCC

Table I-19
Maximum Output Powers

Combination	PCC Band	PCC									SCC 1					Power	
		PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA [25A]-26A	LTE B26	15	26865	831.5	QPSK	1	74	8865	876.5	2x2	LTE B25	20	8365	1962.5	4x4	24.14	24.25
CA 26A-[41A]	LTE B26	15	26865	831.5	QPSK	1	74	8865	876.5	2x2	LTE B41	20	40620	2593	4x4	24.23	24.25

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I.3.7 LTE Band 66 as PCC

Table I-20
Maximum Output Powers

[illegible]

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I.3.10 LTE Band 41 as PCC

Table I-23
Maximum Output Powers

Combination	PCC										SCC 1					Power	
	PCC Band	PCC BW [MHz]	PCC (UL) Ch.	PCC (UL) Freq. [MHz]	Mod.	PCC UL# RB	PCC UL RB Offset	PCC (DL) Ch.	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch.	SCC (DL) Freq. [MHz]	DL Ant. Config.	LTE Tx.Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)
CA [41A]-41A (1)	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	2x2	LTE B41	20	41490	2680	4x4	24.00	24.02
CA [41A]-41A	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	2x2	LTE B41	20	41490	2680	4x4	24.03	24.02
CA 41A-[41A]	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	4x4	LTE B41	20	41490	2680	2x2	24.00	24.02
CA [41A]-[41A] (1)	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	4x4	LTE B41	20	41490	2680	4x4	23.97	24.02
CA 41A-[41C]	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	2x2	LTE B41	20	41292	2660.2	4x4	23.72	24.02
CA [41C]-41A	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	4x4	LTE B41	20	40356	2566.6	4x4	24.00	24.02
CA [41A]-41C	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	4x4	LTE B41	20	41292	2660.2	2x2	23.96	24.02
CA 41C-[41A]	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	2x2	LTE B41	20	40356	2566.6	2x2	23.73	24.02
CA [41A]-[41C]	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	4x4	LTE B41	20	41292	2660.2	4x4	23.98	24.02
CA [41C]-[41A]	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	4x4	LTE B41	20	40356	2566.6	4x4	23.96	24.02
CA [41D]	LTE B41	15	40185	2549.5	QPSK	1	0	40185	2549.5	4x4	LTE B41	20	40356	2566.6	4x4	24.01	24.02

I.3.11 LTE Band 48 as PCC

Table I-24
Maximum Output Powers

Combination	PCC Band	PCC BW [MHz]	PCC (UL) Ch. Freq. [MHz]	Mod.	PCC UL RB	PCC UL RB Offset	PCC (DL) Freq. [MHz]	DL Ant. Config.	SCC 1				SCC 2				SCC 3				SCC 4				Power									
									SCC Band	SCC BW [MHz]	SCC (DL) Ch. Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch. Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch. Freq. [MHz]	DL Ant. Config.	SCC Band	SCC BW [MHz]	SCC (DL) Ch. Freq. [MHz]	DL Ant. Config.	LTE Tx Power with DL CA Enabled (dBm)	LTE Single Carrier Tx Power (dBm)								
CA [48B]	LTE B48	5	55757	3601.7	QPSK	1	0	55757	3601.7	4x4	LTE B48	10	55856	3611.6	4x4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23.15	23.23		
CA 48A-[48D]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	2x2	LTE B48	20	55340	3560	4x4	LTE B48	20	55338	3579.8	4x4	LTE B48	20	55736	3599.6	4x4	-	-	-	-	-	-	23.32	23.24	
CA [48D]-48A	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	56115	3637.5	4x4	LTE B48	20	55917	3617.7	4x4	LTE B48	20	56640	3690	2x2	-	-	-	-	-	-	23.16	23.28	
CA [48A]-48D	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	55340	3560	2x2	LTE B48	20	55338	3579.8	2x2	LTE B48	20	55736	3599.6	2x2	-	-	-	-	-	-	23.29	23.24	
CA 48D-[48A]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	2x2	LTE B48	20	56115	3637.5	2x2	LTE B48	20	55917	3617.7	2x2	LTE B48	20	56640	3690	4x4	-	-	-	-	-	-	23.08	23.24	
CA [48A]-[48D]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	55340	3560	4x4	LTE B48	20	55338	3579.8	4x4	LTE B48	20	55736	3599.6	4x4	-	-	-	-	-	-	23.22	23.24	
CA [48D]-[48A]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	56115	3637.5	4x4	LTE B48	20	55917	3617.7	4x4	LTE B48	20	56640	3690	4x4	-	-	-	-	-	-	23.21	23.24	
CA [48C]-[48C]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	56115	3637.5	4x4	LTE B48	20	55340	3560	4x4	LTE B48	20	55538	3579.8	4x4	-	-	-	-	-	-	23.19	23.24	
CA [48B]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	56115	3637.5	4x4	LTE B48	20	55917	3617.7	4x4	LTE B48	20	55736	3599.6	4x4	-	-	-	-	-	-	23.22	23.28	
CA [48A]-48E	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	56340	3660	2x2	LTE B48	20	56038	3679.8	2x2	LTE B48	20	56736	3699.6	2x2	LTE B48	20	56934	3615.4	2x2	-	-	23.15	23.24
CA 48E-[48A]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	2x2	LTE B48	20	56515	3637.5	2x2	LTE B48	20	56917	3617.7	2x2	LTE B48	20	56638	3689.8	2x2	LTE B48	20	56640	3690	4x4	-	-	23.17	23.24
CA 48C-[48D]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	2x2	LTE B48	20	56515	3637.5	2x2	LTE B48	20	56340	3660	4x4	LTE B48	20	56538	3679.8	4x4	LTE B48	20	56736	3699.6	4x4	-	-	23.15	23.24
CA [48D]-48C	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	56515	3637.5	4x4	LTE B48	20	56917	3617.7	4x4	LTE B48	20	56640	3690	2x2	LTE B48	20	56442	3670.2	2x2	-	-	23.19	23.24
CA [48C]-48D	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	4x4	LTE B48	20	56515	3637.5	4x4	LTE B48	20	56340	3660	2x2	LTE B48	20	56538	3679.8	2x2	LTE B48	20	56736	3699.6	2x2	-	-	23.16	23.24
CA 48D-[48C]	LTE B48	5	56232	3649.2	QPSK	1	0	56232	3649.2	2x2	LTE B48	20	56515	3637.5	2x2	LTE B48	20	56917	3617.7	2x2	LTE B48	20	56640	3690	4x4	LTE B48	20	56442	3670.2	4x4	-	-	23.17	23.24

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